IN THE

Supreme Court of the United States

OCTOBER TERM 1971

No. 71-485

ROBERT GOTTSCHALK, ACTING COMMISSIONER OF PATENTS,
Petitioner,

v.

GARY R. BENSON and ARTHUR C. TABBOT,
Respondents.

On Petition for Writ of Certiorari to the United States Court of Customs and Patent Appeals

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MOTION FOR LEAVE TO FILE BRIEF AMICUS CURIAE

International Business Machines Corporation (IBM) respectfully moves for leave to file the attached Brief Amicus Curiae in the above-entitled case. Petitioner has consented to the filing of this Brief. Counsel for respondents has not consented.

IBM is a corporation organized in 1924 under the laws of the State of New York. Its principal business is the manufacture and sale of a wide range of general purpose computers and various associated peripheral equipment. IBM supplies various services to computer users and creates and markets computer programs. IBM also manu-

factures office equipment such as typewriters, dictation equipment, copying equipment and related supplies.

IBM employs over 10,000 computer programmers and included in that number are many of the more than 7,000 mathematicians employed by IBM. Innovative computer programming is of particular importance to a computer manufacturer like IBM because it increases the utility of computers. Research in the use of mathematical or computational techniques is also of great importance to computer manufacturers because many significant uses of computers, for example, in space exploration, derive from breakthroughs in mathematics that most practically can be performed with the aid of a computer.

The attached Brief Amicus Curiae deals with three aspects of the question presented in this case that are not fully treated in the Government's Petition: first, the consistent rejection by the Court of Customs and Patent Appeals of Patent Office efforts to follow rules of law declared in prior decisions of this Court; second, the rejection of patent protection for computer programs by other countries; and third, the availability of copyright protection and current legislative consideration of other forms of protection for proprietary rights in computer programs.

Accordingly, IBM respectfully requests that this Court grant leave to file the attached Brief Amicus Curiae.

Respectfully submitted,

LLOYD N. CUTLER

EZEKIEL G. STODDARD

DEANNE C. SIEMER
900 17th Street, N.W.
Washington, D.C. 20006

EDWARD S. IRONS

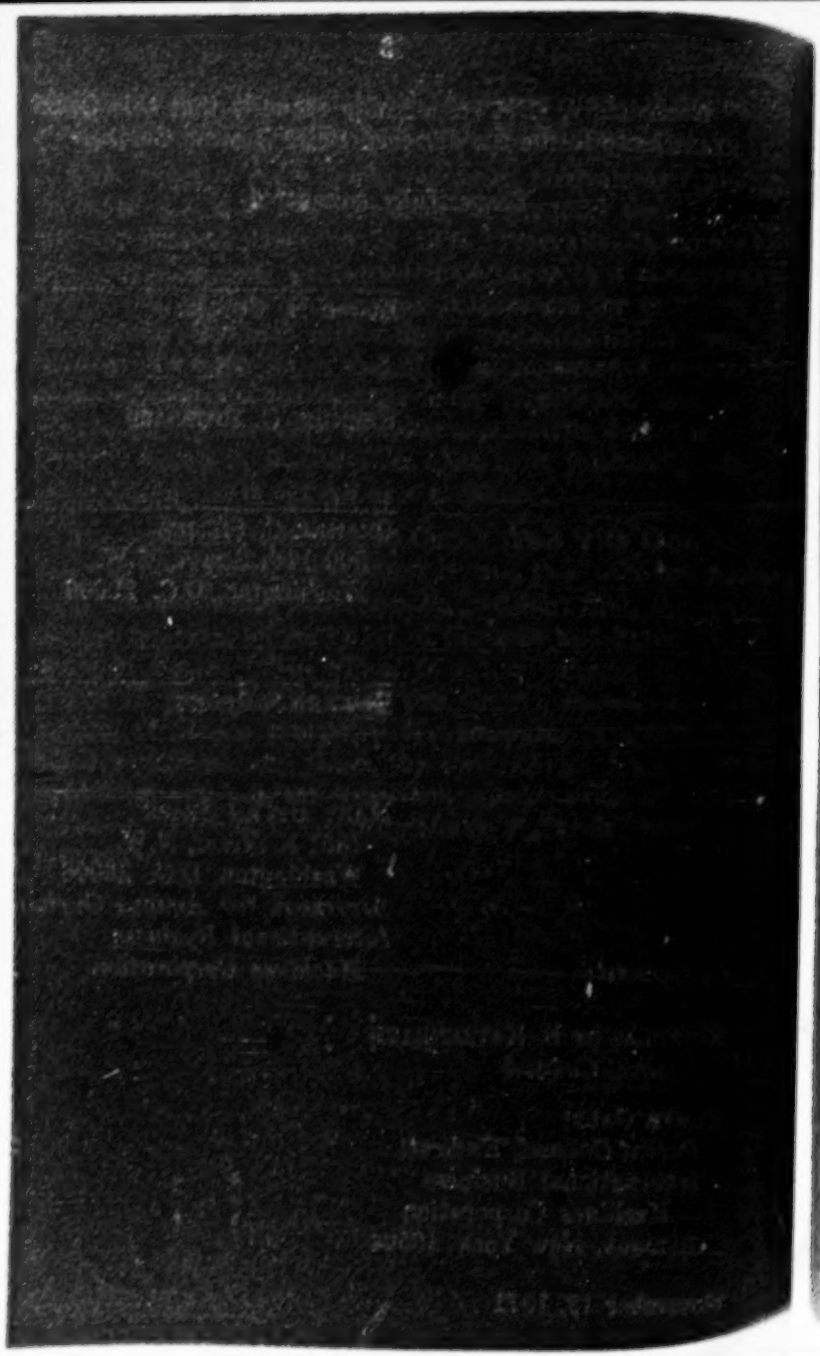
MARY HELEN SEARS
1801 K Street, N.W.
Washington, D.C. 20006
Attorneys for Amicus Curiae
International Business
Machines Corporation

Of Counsel:

NICHOLAS DE B. KATZENBACH
General Counsel

ELMER GALBI
Patent Counsel, Endicott
International Business
Machines Corporation
Armonk, New York 10504

November 19, 1971



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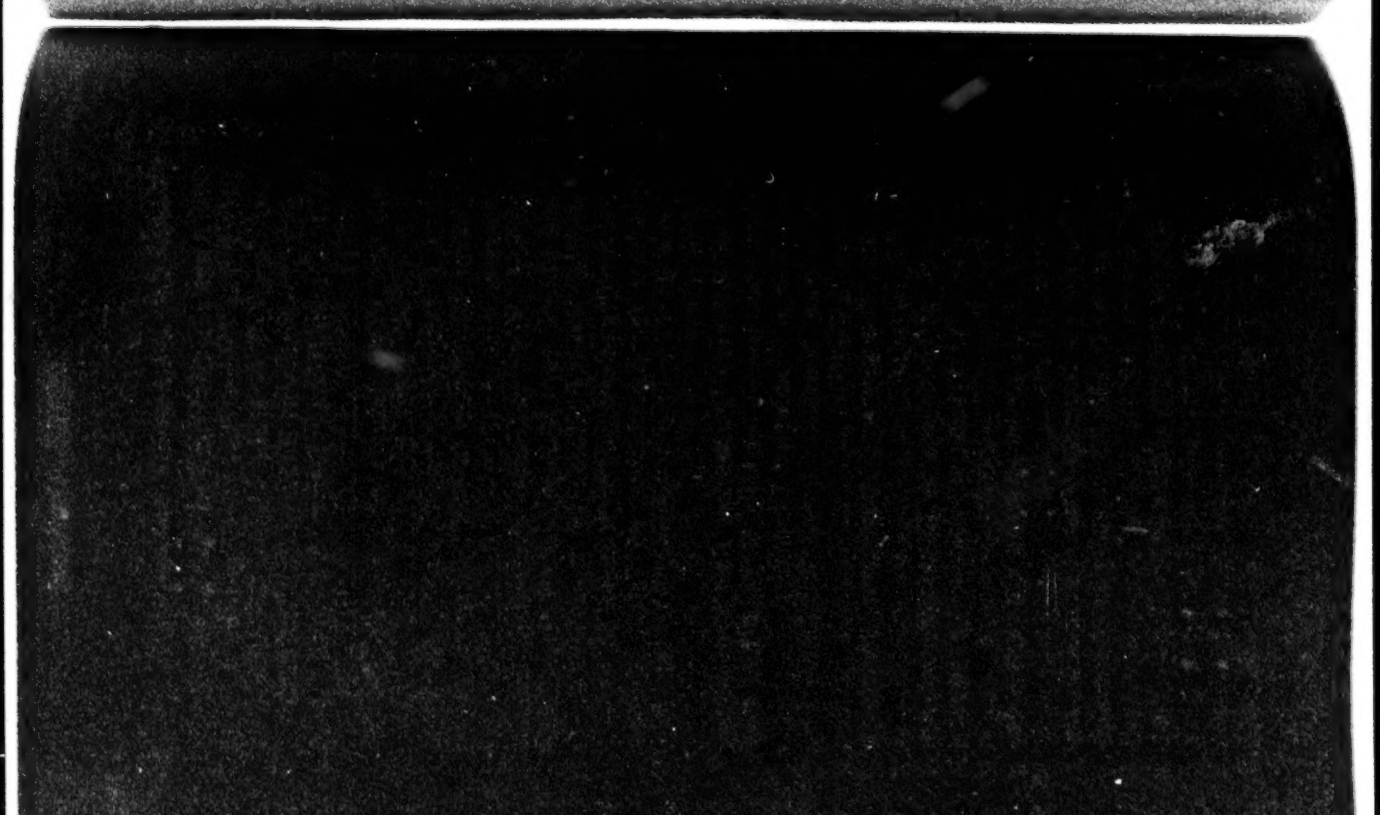

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GARY R. BENSON and ARTHUR C. TABBOT,
Respondents.

On Petition for Writ of Certiorari to the United States Court of Customs and Patent Appeals

BRIEF AMICUS CURIAE FOR INTERNATIONAL BUSINESS MACHINES CORPORATION

Questions Presented

1. Whether this Court should exercise its supervisory jurisdiction to resolve the conflict between the Patent Office and the Court of Customs and Patent Appeals as to the standards of patentability applicable to process claims.

2. Whether a novel method of arithmetical calculation that normally, but not necessarily, is performed by an old computer is a patentable process.

Interest of Amicus Curiae

IBM is a corporation organized in 1924 under the laws of the State of New York. Its principal business is the manufacture and sale of a wide range of general pur-

ose computers and various associated peripheral equipment. IBM supplies various services to computer users and creates and markets computer programs. IBM also manufactures office equipment such as typewriters, dictation equipment, copying equipment and related supplies.

IBM employs over 10,000 computer programmers and included in that number are many of the more than 7,000 mathematicians employed by IBM. Innovative computer programming is of particular importance to a computer manufacturer like IBM because it increases the utility of computers. Research in the use of mathematical or computational techniques is also of great importance to computer manufacturers because many significant uses of computers, for example, in space exploration, derive from breakthroughs in mathematics that most practically can be performed with the aid of a computer.

The interest of amicus curiae is to deal with three aspects of the question presented in this case that are not fully treated in the Government's Petition: first, the consistent rejection by the Court of Customs and Patent Appeals of Patent Office efforts to follow rules of law declared in prior decisions of this Court; second, the rejection of patent protection for computer programs by other countries; and third, the availability of copyright protection and current legislative consideration of other forms of protection for proprietary rights in computer programs.

Reasons for Granting the Writ

1. THE COURT BELOW HAS PERSISTENTLY IMPOSED UPON THE PATENT OFFICE AN IMPROPER STANDARD OF PATENTABILITY WITH RESPECT TO COMPUTER PROGRAMS

It is clear from the record in this case that the invention for which a patent is sought is a mathematical algorithm that may be embodied in a computer program.

It is a method, recipe, or set of rules that can be used for solving a problem with the aid of a general purpose digital computer.[1] Respondents claimed their invention was a patentable process.

The patentability of a process is governed by the standard this Court enunciated in *Cochrane* v. *Deener*, 94 U.S. 780 (1876). That standard includes a universally recognized prohibition against the patenting of mathematical techniques, scientific principles and other abstract concepts or rules."[2] *Le Roy* v. *Tatham*, 55 U.S. (17 How.) 155, 174 (1852); *O'Reilly* v. *Morse*, 56 U.S. (15 How.) 62, 112-19 (1853); *Mackay Radio & Telegraph Co.* v. *Radio Corp. of America*, 306 U.S. 86, 94 (1939); *see also The Telephone Cases*, 126 U.S. 1, 534 (1888); *DeForest Radio Co.* v. *General Electric Co.*, 283

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[1] The Benson and Tabbot patent application states at the outset:

> "This invention relates to the processing of data by program and more particularly to the programmed conversion of numerical information." Record before the Court of Customs and Patent Appeals (hereinafter "Record") at 8.

The Patent Office Board of Appeals found:

> ". . . that claim 13 is so broad as to read on the mental activity alone of a mathematician while carrying out a set of rules or, more precisely, an algorithm, that expresses a relation of one arbitrary system of symbolizing an abstract number to another system for symbolizing the same abstract number. There is no physical act on a physical thing suggested by this claim and it is merely the definition of a mathematical algorithm. Record at 139; Petition for Certiorari, *Gottschalk* v. *Benson et al*, No. 71-485, Appendix D, at 39 (hereinafter "Petition").

[2] This principle has been emphasized by every major treatise on patent law. *See, e.g.*, PHILLIPS, THE LAW OF PATENTS FOR INVENTIONS 109-110 (1837); CURTIS, A TREATISE ON THE LAW OF PATENTS FOR USEFUL INVENTIONS IN THE UNITED STATES OF AMERICA 56-7 (1st ed. 1849); THE AMERICAN LAW REGISTER 129, 143 (Jan. 1868); 1 ROBINSON, THE LAW OF PATENTS FOR USEFUL INVENTIONS 190-91 (1890); 1 WALKER ON PATENTS 186-47 (Deller 2d ed. 1964).

U.S. 664, 684-85 (1931); *Funk Brothers Seed Co.* v. *Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948).

The Patent Office applied the Supreme Court standard referred to above and rejected the respondents' patent application because the process described was simply a method of manipulating mathematical symbols. Record at 140; Petition, App. D, at 40. The Court of Customs and Patent Appeals reversed, declaring that the standard of patentability used by the Patent Office was inapplicable and no longer the law.

The decision below is the culmination of a series of cases in which the Patent Office and the Court of Customs and Patent Appeals (hereinafter "CCPA") have been at loggerheads over whether a broad range of new methods that fall under the general rubric of computer programs constitute patentable subject matter. The Patent Office has been castigated for "refusing to follow what this reviewing court [the CCPA] has now declared the law to be. . . ." *Application of Prater*, 415 F.2d 1378, 1390 (C.C.P.A. 1968, Rich, J. dissenting from grant of rehearing). The situation is distinctly parallel to the running dispute between the Patent Office and the CCPA as to the proper standard to be applied in assessing utility that caused this Court to grant certiorari in *Brenner* v. *Manson*, 383 U.S. 519, 522 (1966).[8]

This Court should exercise its supervisory jurisdiction and review the decision below because the decision below directly contradicts prior decisions of this Court and

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[8] In *Brenner*, the Court recognized a clear conflict between the Patent Office and the CCPA and an arguable conflict between the CCPA and the Court of Appeals for the District of Columbia, 383 U.S. at 522, n. 4. Here the conflict between Patent Office and CCPA is equally clear and there is again, at least arguably, a conflict with the Court of Appeals for the District of Columbia. *See Lyman* v. *Ladd*, 347 F.2d 423 (D.C. Cir. 1964).

requires the Patent Office to issue patents contrary to those decisions.[4]

The full sweep of the departure from prior decisions of this Court is apparent from a brief examination of the line of cases of which this case is one. The cumulative result of these decisions is clearly inconsistent with the constitutional standard of promoting progress in the useful arts.

The first case was *Application of Prater*, 415 F.2d 1378 (C.C.P.A. 1968) (hereinafter *"Prater I"*), in which the CCPA enunciated a sweeping change and embraced the patentability of claims containing so-called mental steps. Effectively repudiated were the CCPA's own prior and conflicting decisions in *In re Abrams*, 188 F.2d 165 (C.C.P.A. 1951), and *Application of Shao Wen Yuan*, 188 F.2d 377 (C.C.P.A. 1951), each of which relied upon this Court's decision in *Cochrane* v. *Deener*, 94 U.S. 780 (1876).

The mental steps doctrine, although sometimes difficult to apply, had long been in effect as a major practical application of the prohibition against the patenting of mathematical techniques, scientific principles, and other abstract concepts or rules. Its demise was, therefore, of great significance. The Patent Office sought, and was granted, a rehearing.[5] The decision on rehearing, *Application of Prater*, 415 F.2d 1393 (C.C.P.A. 1969) (hereinafter *"Prater II"*), did not disavow the principles enunciated in *Prater I*, but found unpatentable, on grounds of undue breadth, the process claims allowed in *Prater I*.

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[4] Under 35 U.S.C. §§ 141-144, the CCPA exercises binding appellate jurisdiction over the Patent Office. For this reason the Patent Office Guidelines for Examination of Patent Applications on Computer Programs, 33 Fed. Reg. 15609 (1968), which enunciated a blanket policy of denying patents for computer programs, were rescinded, 34 Fed. Reg. 15724 (1969), in light of the decision in *Application of Prater*, 415 F.2d 1393 (C.C.P.A. 1969).

[5] A lengthy dissenting opinion further illuminates the character of the running dispute between the Patent Office and the CCPA. 415 F.2d at 1390.

In its next computer program case, *Application of Bernhart*, 417 F.2d 1395 (C.C.P.A. 1969), the CCPA paid lip service to the inescapable fact "that in enacting section 101 Congress meant to exclude principles or laws of nature and mathematics . . . from even temporary monopolization by patent," 417 F.2d at 1399, but nonetheless found patentable certain claims drawn to the admittedly known combination of (1) a computer, (2) a plotter, and (3) a computer program. The sole novelty involved was the allegedly new set of mathematical equations contained in the computer program. The Patent Office had properly held the programmed computer-plotting device unit to be unpatentable under the doctrine of "old combination" which precludes repatenting the whole combination when an element is improved. The court below acknowledged that this doctrine has the support of many cases,[6] but pronounced the doctrine "unsound" in several respects. 417 F.2d at 1402. The CCPA held that the proper test was that enunciated in Section 112[7] which requires that claims specifically point out and distinctly claim the invention. On this basis the CCPA held the Patent Office rejection to be erroneous because "we do not see . . . how any of the claims would be made more particular or distinct by eliminating the

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[6] Citing this Court's decision in *Lincoln Engineering Co.* v. *Stewart-Warner Corp.*, 303 U.S. 545 (1938). 417 F.2d at 1402. *See also Heald* v. *Rice*, 104 U.S. 737 (1881); *Deering* v. *Winona Harvester Works*, 155 U.S. 286 (1894); *Bassick Manufacturing Co.* v. *R. M. Hollingshead Co.*, 298 U.S. 415 (1936); and, with specific reference to the Patent Act of 1952, *Anderson's-Black Rock, Inc.* v. *Pavement Salvage Co.*, 396 U.S. 57 (1969).

[7] As this Court indicated in *Anderson's-Black Rock, Inc.* v. *Pavement Salvage Co.*, 396 U.S. 57 (1969), the statutory basis actually is found in Section 103.

Proper consideration of the old combination doctrine under Section 103 would have required the CCPA to focus on the differences between the claimed subject matter and the prior art, and to acknowledge that the sole novelty lay in the computer program. Patentability could then be found only by borrowing invention from the mathematical equations in derogation of *Funk Brothers Seed Co.* v. *Kalo Inoculant Co.*, 333 U.S. 127, 132 (1948).

plotting machine limitation from the body of the claim." 417 F.2d at 1403. Glossed over was the fact, fatal to allowability of the claims, that elimination of the plotting machine limitation would have reduced the claim to a further "old combination" of a computer with a program, from which elimination of the old computer would strip the claim to its single novel feature, the recitation of a set of mathematical equations which the CCPA had acknowledged Congress meant to exclude from patent protection.[8]

In *Application of Mahony*, 421 F.2d 742 (C.C.P.A. 1970), the CCPA reversed a Patent Office rejection that was premised upon the position "that where a claim reads on both statutory and nonstatutory subject matter [under 35 U.S.C. 101] it could not be in compliance with the second paragraph of section 112." The CCPA simply stated, "[w]ith this view we disagree." 421 F.2d at 745. No attempt was made to rationalize prior inconsistent decisions of this or any other court, including *Funk Brothers Seed Co.* v. *Kalo Inoculant Co.*, 333 U.S. 127 (1948), and *Lyman* v. *Ladd*, 347 F.2d 482 (D.C. Cir. 1965).

In *Application of Musgrave*, 431 F.2d 882 (C.C.P.A. 1970), the court below not only reaffirmed *Prater I*, but, relying upon its own rejection of the doctrine of aggregation,[9] expanded its holding to the point that "[a]ll

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[8] *Cf. Lyman* v. *Ladd*, 347 F.2d 482 (D.C. Cir. 1965), where a "mathematical apportionment" of old structural elements was held unpatentable.

[9] The CCPA rejected the aggregation doctrine in *Application of Gustafson*, 331 F.2d 905 (C.C.P.A. 1964).

This Court has applied the aggregation doctrine in an unbroken line of cases extending from *Hailes* v. *Van Wormer*, 87 U.S. (20 Wall.) 353 (1873); through *Reckendorfer* v. *Faber*, 92 U.S. 347 (1875); *Pickering* v. *McCullough*, 104 U.S. 310 (1881); *Richards* v. *Chase Elevator Co.*, 158 U.S. 299 (1895); *Great Atl. & Pac. Tea Co.* v. *Supermarket Equipment Corp.*, 340 U.S. 147 (1950); to *Anderson's-Black Rock, Inc.* v. *Pavement Salvage Co.*, 396 U.S. 57 (1969).

The Patent Office, bound by the CCPA decision, has now discarded the doctrine. *See Ex parte Held*, 146 U.S.P.Q. 553 (Pat. Off. Bd. App. 1965).

that is necessary . . . to make a sequence of operational steps a statutory 'process' within 35 U.S.C. 101 is that it be in the technological arts. . . ." 431 F.2d at 893. As the concurring opinion observed, "one no longer need disclose apparatus for carrying out his process." 431 F.2d at 894.

Once more, in *Application of Foster*, 438 F.2d 1011 (C.C.P.A. 1971), the Patent Office attempted, without success, to stem the onslaught of computer program patent claims. Reaffirming *Musgrave* and its antecedents, the CCPA also rejected still another rule repeatedly enunciated by this Court, that a process constituting merely the inherent function of a machine is *per se* unpatentable.[10] This was necessary in order to hold patentable the process claims defining the use of an old computer to perform its intended function with a specific new program.

In this case, *Application of Benson*, 441 F.2d 682 (C.C.P.A. 1971), the CCPA followed its own new rules of law as enunciated in the cases discussed above and applied what was termed a standard of reasonableness

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[10] The rule is articulated in *Corning* v. *Burden*, 56 U.S. (15 How.) 252, 268 (1853); *Risdon Iron and Locomotive Works* v. *Medart*, 158 U.S. 68, 72 (1895); *Westinghouse* v. *Boyden Power Brake Co.*, 170 U.S. 537, 554-57 (1898); *Busch* v. *Jones*, 184 U.S. 598, 607 (1902); *Expanded Metal Co.* v. *Bradford*, 214 U.S. 366, 383 (1909).

The CCPA first squarely rejected this rule in *Application of Tarczy-Hornoch*, 397 F.2d 856 (C.C.P.A. 1968), and dismissed all of this precedent as "the product of an essentially illogical distinction unwarranted by, and at odds with, the basic purposes of the patent system and productive of a range of undesirable results from the harshly inequitable to the silly." 397 F.2d at 867. In view of *Tarczy-Hornoch*, the Manual of Patent Examining of Procedure § 706.03(r) has been revised by the Patent Office to eliminate rejections of process claims based on mere function of machine grounds.

to the interpretation of respondents' claims.[11] As the court below stated, "given the meaning they would have to one of ordinary skill in the pertinent art when read in the light of and consistently with the specification" each of respondents' claims was primarily concerned with a machine-implemented process rather than a mentally implemented one. 441 F.2d at 687.

However, any inference that machine implementation is a desideratum—or even a factor—in assessing patentability of computer program claims was squarely denied in *Application of McIlroy*, 442 F.2d 1397 (C.C.P.A. 1971), decided just three weeks after the *Benson* decision. There the CCPA came full circle and, abandoning all inference that *Prater I* may have overreached in this regard, candidly asserted that "machine implementation versus mental implementation is *not* a determinative dichotomy" in assessing patentability. 442 F.2d at 1398 (emphasis added).

As a result of these decisions the Patent Office is now obligated to grant claims which recite as their sole novel feature mathematical techniques, scientific principles and other abstract concepts or rules.

This result is inconsistent with the patent clause of the Constitution which grants the Congress only a qualified authority limited to promoting advances in science and the useful arts. *Graham* v. *John Deere Co.*, 383 U.S. 1, 5-6 (1966). It was early recognized that "if a patent could be taken for a newly discovered principle in science, it would cover every object to which the principle could be applied. . . ." CURTIS, A TREATISE ON THE

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[11] This standard was utilized, in effect, to narrow the claim to the computer-implemented process exemplified in the specification, *contra* the decisions of this Court. *E.g.*, *White* v. *Dunbar*, 119 U.S. 47 (1886); *The Incandescent Lamp Patent*, 159 U.S. 465 (1895); *General Electric Co.* v. *Wabash Appliance Corp.*, 304 U.S. 364 (1938); *Halliburton Oil Well Cementing Co.* v. *Walker*, 329 U.S. 1 (1946).

LAW OF PATENTS FOR USEFUL INVENTIONS IN THE UNITED STATES OF AMERICA 62-63 (1st ed. 1849). This would not promote advances in the useful arts and this Court has consistently so held. *O'Reilly* v. *Morse*, 56 U.S. (15 How.) 52 (1853); *The Telephone Cases*, 126 U.S. 1 (1888); *DeForest Radio Co.* v. *General Electric Co.*, 283 U.S. 664 (1931); *Mackay Radio & Telegraph Co.* v. *Radio Corp. of America*, 306 U.S. 86 (1939); *Funk Brothers Seed Co.* v. *Kalo Inoculant Co.*, 333 U.S. 127 (1948).

The prohibition against patenting abstract principles necessarily limits patentability to processes involving a mode of treatment of physical materials to obtain a different state or thing—thus precluding the patenting, under the guise of processes, of purely intellectual discoveries such as the exercise in mathematics defined by respondents' claims. As Robinson teaches

> "Every invention, when applied according to the design of its inventor, must accomplish some change in the character or condition of material objects. This is as essential in a patentable art as in an instrument. Hence a plan or theory of action which, if carried into practice, could produce no physical results proceeding directly from the operation of the theory or plan itself, is not an art within the meaning of the Patent Law, however greatly it may promote the comfort or the welfare of mankind. . . ." 1 ROBINSON, THE LAW OF PATENTS FOR USEFUL INVENTIONS 249-50 (1890).

This, of course, is the rationale of the definition of a patentable process enunciated in *Cochrane* v. *Deener*, 94 U.S. 780 (1876), from which this Court has never departed.[13] In 1951, the CCPA held that it was bound

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[13] *E.g.*, *New Process Fermentation Co.* v. *Maus*, 122 U.S. 413, 427-28 (1887); *The Telephone Cases*, 126 U.S. 1, 533 (1888); *Fond Du Lac County* v. *May*, 137 U.S. 395, 407 (1890); *Risdon Iron and Locomotive Works* v. *Medart*, 158 U.S. 68, 75 (1895); *Expanded Metal Co.* v. *Bradford*, 214 U.S. 366, 383-84 (1909).

by the rule in *Cochrane*. *Application of Shao Wen Yuan*, 188 F.2d 377, 382 (C.C.P.A. 1951). However, in 1968 and thereafter, the CCPA characterized that rule as mere dictum. *Application of Prater*, 415 F.2d 1378, 1387-88 (C.C.P.A. 1968); *Application of Musgrave*, 431 F.2d 882, 893 (C.C.P.A. 1970).

If the rule in *Cochrane* had been followed by the CCPA, as it was by the Patent Office, none of the patents in the line of cases beginning with *Prater* and ending with *McIlroy* would have been allowed. The CCPA, in conflict with every relevant decision of this Court, has repudiated its own prior decisions to issue a series of rulings, including the decision below, which decree that claims covering abstract mathematical or scientific principles are patentable; that the originator of an abstract principle may obtain a patent covering the principle *per se* without limitation to such practical application thereof as his specification may disclose; and that patentability is imparted to any abstract principle by defining it as a "process" utilized in a computer program. It is for this reason that the Court should review the decision in this case.

2. THE PRACTICE IN OTHER COUNTRIES IS TO DENY PATENT PROTECTION FOR COMPUTER PROGRAMS

The question of the patentability of advances in computer programming has been raised in at least nine other countries, either with respect to specific legislative proposals or decisions under existing law as to applications for patents on computer programs. Although when the question first arose, some countries did issue patents directed to computer programs,[12] most countries now re-

[12] For example, a patent on the computer program at issue in this case was issued by the Patent Office of Canada, Patent No. 732763, on April 19, 1966. This was prior to the issuance of the guidelines referred to below, p. 12.

fuse to grant patent protection for computer programs. In France there is a recently enacted direct statutory prohibition on patents for computer programs.[14] The United Kingdom currently has no such direct statutory prohibition, but the Committee to Examine the Patent System and Patent Law last year strongly recommended adoption of such a provision.[15]

As noted in the Government's Petition, p. 12, n. 3, the Canadian Patent Office has issued administrative instructions that computer programs are not patentable subject matter.[16] Similarly, the Japanese Patent Office has a regular practice of rejecting patent applications directed to computer programs. Japanese Patent Office, Current

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[14] Article 7 of the French Patent Law provides:

"Any invention is considered industrial which in its object, its application and its result, whether achieved by human intervention or by machine, cooperates in the production of goods or technical results. Not considered as industrial inventions, are, in particular: (1) Theoretical, or purely scientific principles, discoveries or concepts; . . . (3) Financial or accounting methods, rules or games, or all other systems of an abstract character and, in particular, the programs or series of instructions used for promoting the operation of a computer." Patent Law of January 2, 1968, art. 7. (An English translation appears in INDUSTRIAL PROPERTY 67-75 (BIRPI, Geneva, Switz., March, 1968).

[15] The Committee's report devoted a full chapter to the protection of computer programs and stated:

"a computer program that is: a set of instructions for controlling the sequence of operations of a data processing system, in whatever form the invention is presented e.g. a method of programming computers, a computer when programmed in a certain way and where the novelty or alleged novelty lies only in the program; should not be patentable." The British Patent System, Report of the Committee to Examine the Patent System and Patent Law, Cmnd. No. 4407, at 144 (July, 1970).

[16] *See also* Economic Council of Canada, Report on Intellectual and Industrial Property (January 1971), which formulated patent policy recommendations and stated: "We conclude, therefore, that patent protection of computer programs would not be appropriate in Canada at the present time." Report at 103.

Situation and Problems Arising from Patent Protection of Software (report submitted to MITI Legal Study Committee, July 2, 1971).

In Australia,[17] Austria,[18] The Netherlands,[19] and Switzerland,[20] Patent Office appellate proceedings have resulted in decisions declaring that computer programs are not patentable subject matter.

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[17] Australia: In three cases appealed from rejections by the examiners, the Australian Patent Office has uniformly held program inventions to be not patentable. *N. V. Phillips*, 36 Official Journal of Patents, Trademarks and Designs 2892 (1966); *Application of Texas Instruments*, 38 Official Journal of Patents, Trademarks and Designs 2846 (1968). *Application of British Petroleum, Ltd.*, 38 Official Journal of Patents, Trademarks and Designs 1020 (1968).

[18] Austria: The Appeal Senate of the Austrian Patent Office recently held that computer programs are not patentable, B32/70 (A125/67), October 29, 1970, and stated:

> "Protection extending solely to computing rules is not practicable, for . . . scientific rules and principles as such were expressly excluded from patent protection."

See also nullity proceeding against Austrian Patent No. 238,978 owned by the British Petroleum Company, Ltd., 11 Patent Gazette 186 (1968).

[19] Netherlands: A recent decision of the Patent Office Board of Appeals, on December 16, 1970, held that computer programs are not patentable under the Netherlands Patent Act and stated:

> "The programming of the device according to the invention, the so-called software, is, indeed, founded on a meritorious idea, but the implementation thereof is unpatentable either as a device or as a process." BIE No. 2, February 15, 1971.

[20] Switzerland: Computer programming inventions are currently considered unpatentable in Switzerland as the result of a Swiss Patent Office decision of September 3, 1968 rejecting an application with claims to a computer program. The application related to a procedure for the design of construction reinforcements by programming the calculation for design on a known computer. In reaching its decision the Patent Office stated that the design of a computer program is not an achievement which uses the means of natural forces or which influences natural forces to achieve a "technical result" but rather a purely mental effort for which patent protection is not available. Patent Muster Und Markenblatt 68-1-53.

Although the question is not settled in Germany, a recent commentary would make it appear that programs are not patentable in Germany.[21]

One of the principal objectives identified by the President's Commission on the Patent System was "[t]o make U.S. patent practice more compatible with that of other major countries, wherever consistent with the objectives of the U.S. patent system." To Promote the Progress of the Useful Arts, Report of the President's Commission on the Patent System at 4 (1966). The Commission found that denying patent protection to computer programs was completely consistent with the objectives of the patent system because

> "the creation of programs has undergone substantial and satisfactory growth in the absence of patent protection and . . . copyright protection for programs is presently available." Report at 13.

Therefore, it is submitted that great weight should be given to the practice in other countries, which is to deny patent protection for computer programs.

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[21] Germany: KRAUSSE, KATHLUN, & LINDENMAIER, DAS PATENTGESETZ (The Patent Act) at 9 (5th ed. 1970) states:

> "In accordance with the opinion generally advanced in German literature, programs for controlling electrical data processors are not patentable. Such processors operate to a program consisting of a sequence of instructions relating to the actual intellectual achievement. Programs do not solve circuit problems but are dependent upon a particular algorithm . . . . The input of the program, that means its storage, which is effected by means of paper, tapes, punched cards or magnetic tapes, does not alter the fact that the program is merely an instruction for operating the machine, by means of which the stored material is to be checked and processed. It does not constitute, however, a teaching for technical action."

3. ANY NEW FORM OF PROTECTION FOR COMPUTER PROGRAMS SHOULD BE ACCOMPLISHED BY LEGISLATION, NOT BY JUDICIAL EXPANSION OF THE PRESENT PATENT SYSTEM

Amicus curiae does not contend that the proprietary rights in computer programs should be without protection. Indeed, in the long run, the maintenance of the necessary incentives to development of new programs may well require some limited form of protection against unauthorized copying or use. Amicus curiae does contend, however, that the current patent statute is an inappropriate and Congressionally unintended means of protection, which cannot and should not be extended by judicial decision to meet this need.

In this connection it is important that copyright protection is available for computer programs and many authors of programs have taken advantage of this form of protection.[22] Copyright achieves the basic purpose of preventing one who has made no investment of time or money in creating a computer program from appropriating the program by copying it. However, it does not prevent the legitimate creator of computer programs from independently arriving at the same result by making his own investment of the required time and effort.

It is also significant that general revision of the patent laws has been under active consideration by the Congress since the report of the President's Commission on the Patent System was issued in 1966 [23] and the question of

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[22] Copyright Office, Library of Congress, Circular 31 D (April, 1967); Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281 (1970).

[23] Nine bills were introduced during the 90th Congress: S. 1042, 90th Cong., 1st Sess. (1967); S. 1691, 90th Cong., 1st Sess. (1967); S. 2164, 90th Cong., 1st Sess. (1967); S. 2597, 90th Cong., 1st Sess. (1967); S. 3892, 90th Cong., 2d Sess. (1968); H.R. 5924, 90th

the patentability of computer programs has been directly addressed. Moreover, several proposals have been made for legislation to create a special and limited form of protection tailored to the computer programming industry.[24]

Whatever form of protection of proprietary rights is to be extended to computer programs should be done by Congress, after full consideration of this new and flourishing field, not by a Congressionally unintended expansion of the patent system.

Cong., 1st Sess. (1967); H.R. 7454, 90th Cong., 1st Sess. (1967); H.R. 10006, 90th Cong., 1st Sess. (1967); H.R. 11447, 90th Cong., 1st Sess. (1967).

Four bills were introduced during the 91st Congress: S. 1246, 91st Cong., 1st Sess. (1969); S. 1569, 91st Cong., 1st Sess. (1969); S. 2756, 91st Cong., 2d Sess. (1970); H.R. 12280, 91st Cong., 1st Sess. (1969).

Two of the bills introduced in the 90th and 91st Congresses were reintroduced in the 92d Congress. S. 643, 92d Cong., 1st Sess. (1971); H.R. 4012, 92d Cong., 1st Sess. (1971). Hearings were held on S. 643 on May 11, 1971. CCH Congressional Index, 92d Congress, p. 2505 (1971).

[24] *See generally*, Goldberg, EDP Software Protection—Present and Future, 1970 Management Conference and Annual Meeting, Assoc. of Data Processing Service Organizations, Inc. (October 15, 1970); 1969 Proceedings, Law of Software Conference, Computers-In-Law Institute, National Law Center, George Washington University.

CONCLUSION

For the reasons stated above, amicus curiae urges that certiorari be granted and that the decision of the Court of Customs and Patent Appeals be reversed.

Respectfully submitted,

LLOYD N. CUTLER

EZEKIEL G. STODDARD

DEANNE C. SIEMER
900 17th Street, N.W.
Washington, D.C. 20006

EDWARD S. IRONS

MARY HELEN SEARS
1801 K Street, N.W.
Washington, D.C. 20006

Attorneys for Amicus Curiae
International Business
Machines Corporation

Of Counsel:

NICHOLAS DE B. KATZENBACH
General Counsel

ELMER GALBI
Patent Counsel, Endicott
International Business
Machines Corporation
Armonk, New York 10504

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